

REMARKS

Claims 1-10 are pending in the present application. By this Amendment, claim 2 has been cancelled, claims 1 and 3-10 have been amended and claims 11-13 have been added. It is submitted that this Amendment is fully responsive to the Office Action dated June 12, 2008. New claim 11 is supported by the description in claim 1, the description in the paragraph [0052] in the specification, and the descriptions of Fig. 5(a) and Fig. 5(b). New claim 12 is supported by the descriptions in claims 1, 9 and 10, the description in the paragraphs [0109] and [0110] in the specification, and the description of Fig. 8. New claim 13 is supported by the descriptions in claims 1 and 5, the descriptions in the paragraphs [0065] to [0068] in the specification, and the descriptions of Fig. 6 and Fig. 7.

Information Disclosure Statement

On page 2, item 3 of the Action, the Examiner states that no copy of JP 58-170,177 U (JP '177) cited in the Information Disclosure Statement of August 30, 2006 can be found in the image file wrapper.

It is believed that a copy of JP '177 was submitted with the Information Disclosure Statement on August 30, 2006 and the USPTO failed to scan the submitted copy of JP '177, which caused this problem. However, to expedite the examination process, the Applicant submits the copy of JP '177 again with a Supplemental Information Disclosure Statement.

Application No.: 10/591,120
Art Unit: 3742

Amendment under 37 CFR §1.111
Attorney Docket No.: 062914

Specification

The specification is objected to because the abstract includes informalities.

This objection is respectfully traversed. It is submitted that such informalities have been corrected by the present Amendment.

Claim Rejections - 35 U.S.C. §103

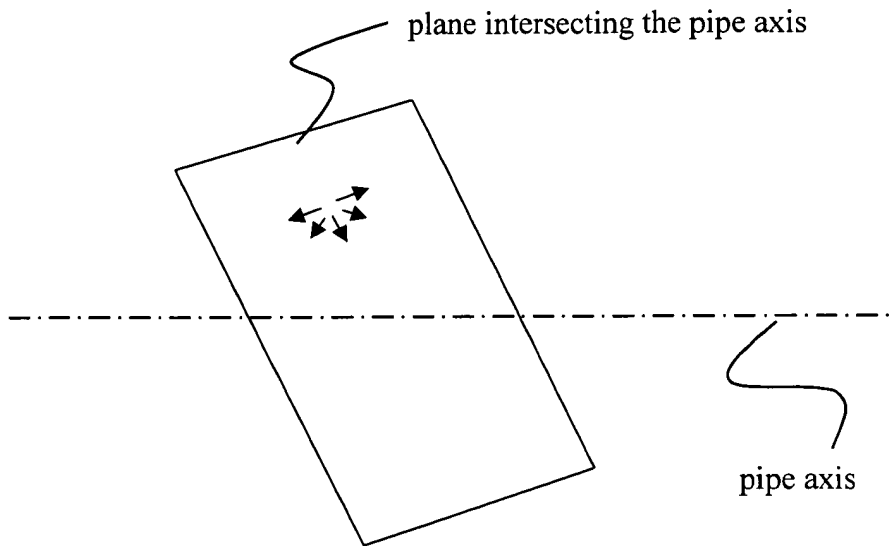
Claims 1, 4/1, 6/4/1 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP 2004-130314 (JP '314) in view of JP 2002-001582 (JP '582).

This rejection is respectfully traversed. Claim 1, as amended, now recites “*reflection direction adjusting unit adjusting an orientation of the laser head in a plane intersecting the pipe axis of the piping to adjust a direction of delivery of the laser light in the plane, thereby adjusting a direction of reflection of the laser light so that the laser light reflected by the outer peripheral surface of the piping does not return to the laser head.*” This amendment is supported by original claim 3. Also, the amendment to claim 3 is supported by the specification (page 23, paragraph 0048).

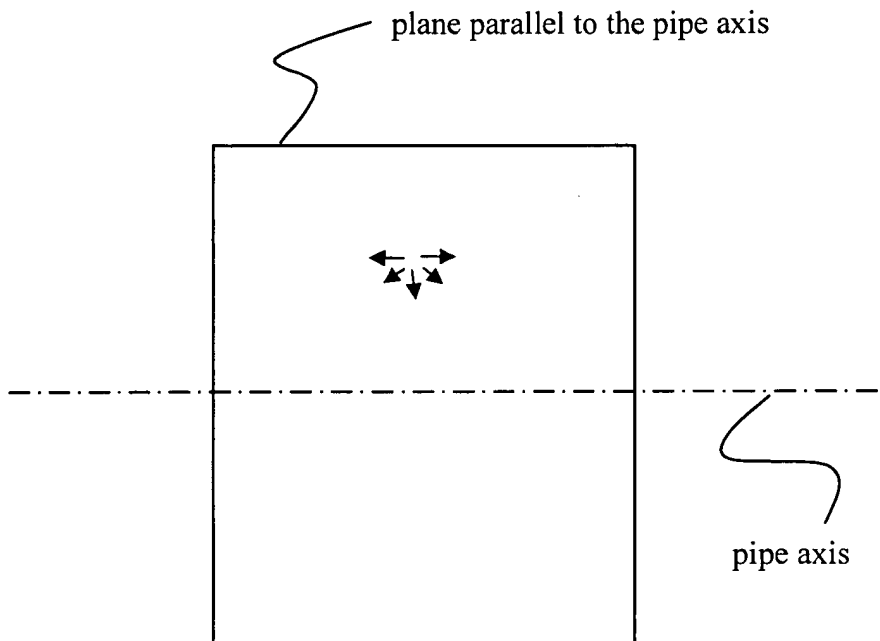
With regard to this feature, regarding the disclosure of JP' 314 and JP '582, the Examiner acknowledges the drawbacks and deficiencies of JP' 314 and JP '582, that is, JP' 314 and JP '582 do not disclose this feature. In an attempt to cure the above-noted drawbacks and deficiencies of JP' 314 and JP '582, the Examiner relies on the teachings of JP 7-009171 (JP '171) and alleges that JP '171 teaches adjusting orientation of the laser beam to a non-perpendicular angle which will thereby adjust the direction of the angle of the reflection of the laser light so that the laser light does not return to the laser head (page 3, item 7 of the Action).

However, the Examiner appears to mischaracterize the above-mentioned claimed features and compare the mischaracterized features with the disclosure of JP '171.

In the present claimed invention, "*reflection direction adjusting unit adjusts an orientation of the laser head in a plane intersecting the pipe axis.*" The plane intersecting the pipe axis is a plane, for example, as described in a drawing below.



On the contrary, JP '171 discloses a laser beam 12c which is inclined by 27.8° (see Fig. 1 and paragraph 0012). However, it is noted that the laser beam 12c is inclined in a plane **parallel to the longitudinal axis of a pipe 1** as shown in Fig. 6. In other words, in JP '171, the laser beam 12c is inclined in a plane **which is parallel to the pipe axis** as shown in a drawing below.



Therefore, even if, assuming *arguendo*, that JP '171 may be combined with JP' 314 and JP '582 in the manner suggested by the Examiner, such combination would still fail to disclose or fairly suggest the claimed feature of “*reflection direction adjusting unit adjusting an orientation of the laser head in a plane intersecting the pipe axis of the piping to adjust a direction of delivery of the laser light in the plane, thereby adjusting a direction of reflection of the laser light so that the laser light reflected by the outer peripheral surface of the piping does not return to the laser head,*” as called for in amended claim 1.

Accordingly, claim 1 distinguishes over JP' 314, JP '582 and JP '171.

Claims 4 and 6 are dependent from claim 1 and recite the additional features set forth therein. Accordingly claims 4 and 6 also distinguish over JP' 314, JP '582 and JP '171 for at least the reasons set forth above.

Claims 2, 3, 4/2, 4/3, 5/1, 5/2, 5/3, 6/4/2, 6/4/3, 9 and 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP 2004-130314 (JP '314) in view of JP 2002-001582 (JP '582), further in view of JP 7-009171 (JP '171).

This rejection is respectfully traversed. It is submitted that claims 3, 4, 5, 6, 9 and 10 are dependent from claim 1 and recite the additional features set forth therein. Accordingly claims 3, 4, 5, 6, 9 and 10 also distinguish over JP' 314, JP '582 and JP '171 for at least the reasons set forth above.

Claim 7/4/1 is rejected under 35 U.S.C. §103(a) as being unpatentable over JP 2004-130314 (JP '314) in view of JP 2002-001582 (JP '582), further in view of Pirl (USP 5,491,317).

This rejection is respectfully traversed. It is submitted that claim 7 is dependent from claim 1 and recites the additional features set forth therein. Accordingly claim 7 also distinguishes over JP' 314, JP '582 and Pirl for at least the reasons set forth above.

Claims 7/4/2 and 7/4/3 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP 2004-130314 (JP '314) in view of JP 2002-001582 (JP '582), further in view of JP 7-009171 (JP '171) and further in view of Pirl (USP 5,491,317).

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This rejection is respectfully traversed. It is submitted that claim 7 is dependent from claim 1 and recites the additional features set forth therein. Accordingly claim 7 also distinguishes over JP' 314, JP '582, JP '171 and Pirl for at least the reasons set forth above.

Claim 8/4/1 is rejected under 35 U.S.C. §103(a) as being unpatentable over JP 2004-130314 (JP '314) in view of JP 2002-001582 (JP '582), further in view of Sator (USP 6,476,345).

This rejection is respectfully traversed. It is submitted that claim 8 is dependent from claim 1 and recites the additional features set forth therein. Accordingly claim 8 also distinguishes over JP' 314, JP '582 and Sator for at least the reasons set forth above.

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In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to be 'TEB', is written over the printed name of Thomas E. Brown.

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